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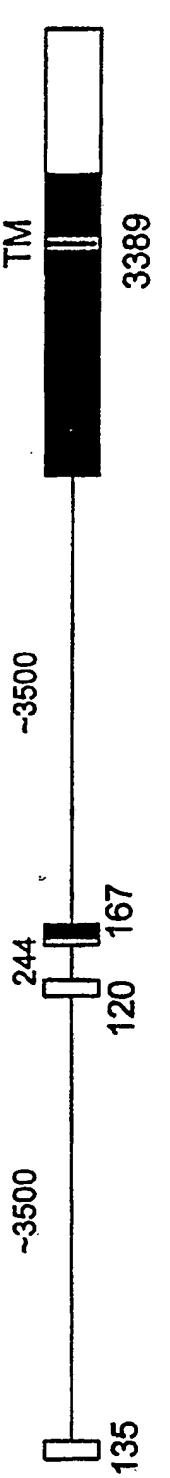
PATENT & TRADEMARK OFFICE



Intron	Position	5' to 3' sequence at EXON/intron boundary
1	135-136	GCGTGGAGgtatgtggctggagtcagct____attttgttttgttttaaagACTTGGCC
2	255-256	TCACGGAGgttagaatgctgagcacgta____gtcatgtgtaatcattgcagGTGGTTCC
3	422-423	TTATCCAGgtaatgaatccactttttaca____atgtcttttattcctgtagGTGTGAAA

FIG. 1

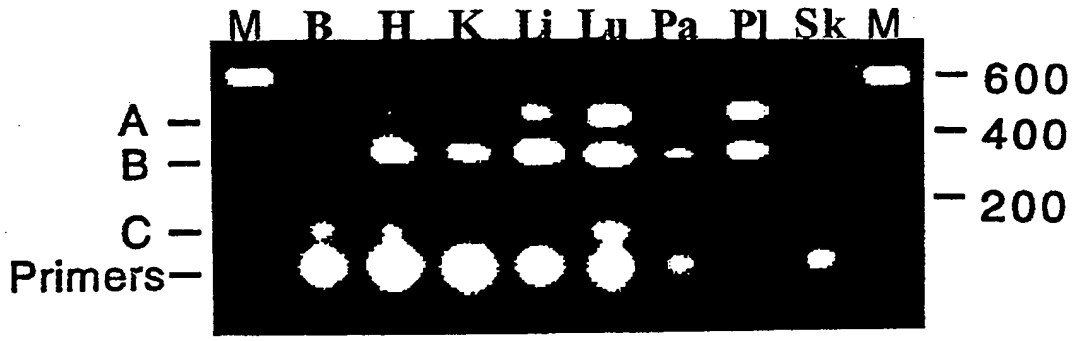


FIG. 2A

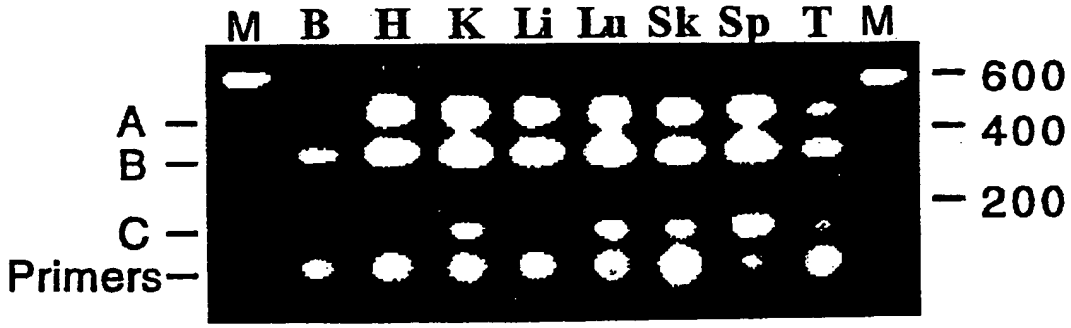


FIG. 2B

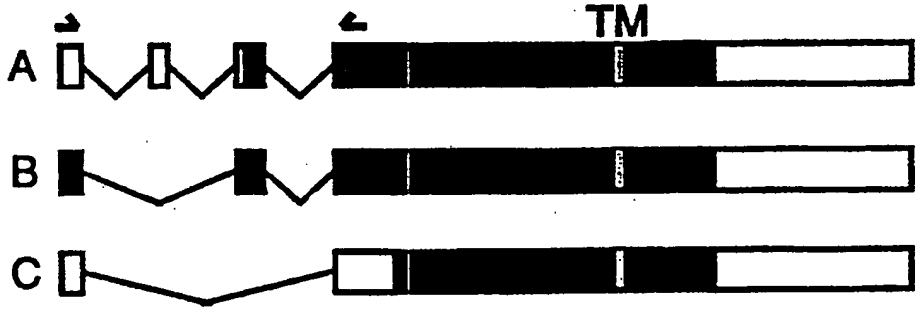


FIG. 2C

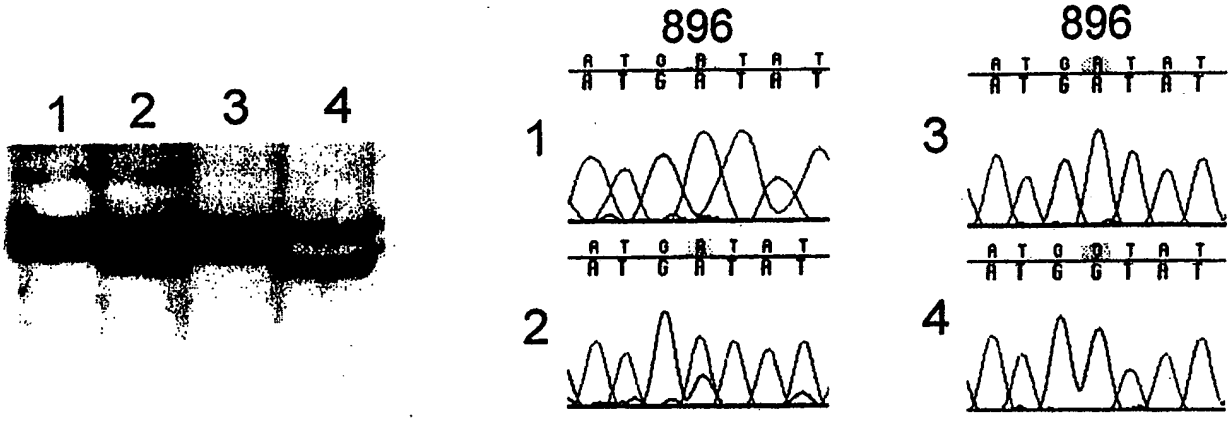


FIG. 3A

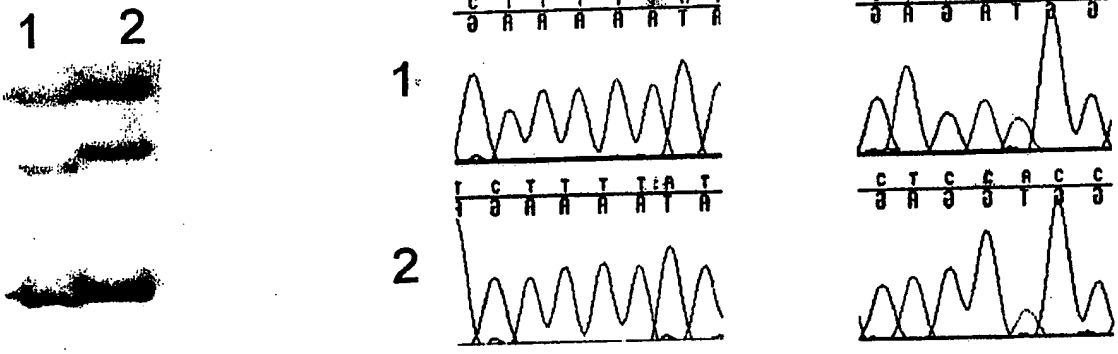


FIG. 3B

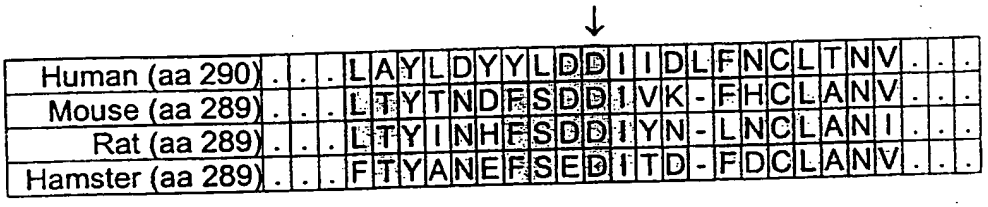

Human (aa 290) . . . L A Y L D Y Y L D D I I D L F N C L T N V . . .
Mouse (aa 289) . . . L T Y T N D F S D D I V K - F H C L A N V . . .
Rat (aa 289) . . . L T Y I N H F S D D I Y N - L N C L A N I . . .
Hamster (aa 289) . . . F T Y A N E F S E D I T D - F D C L A N V . . .

FIG. 4

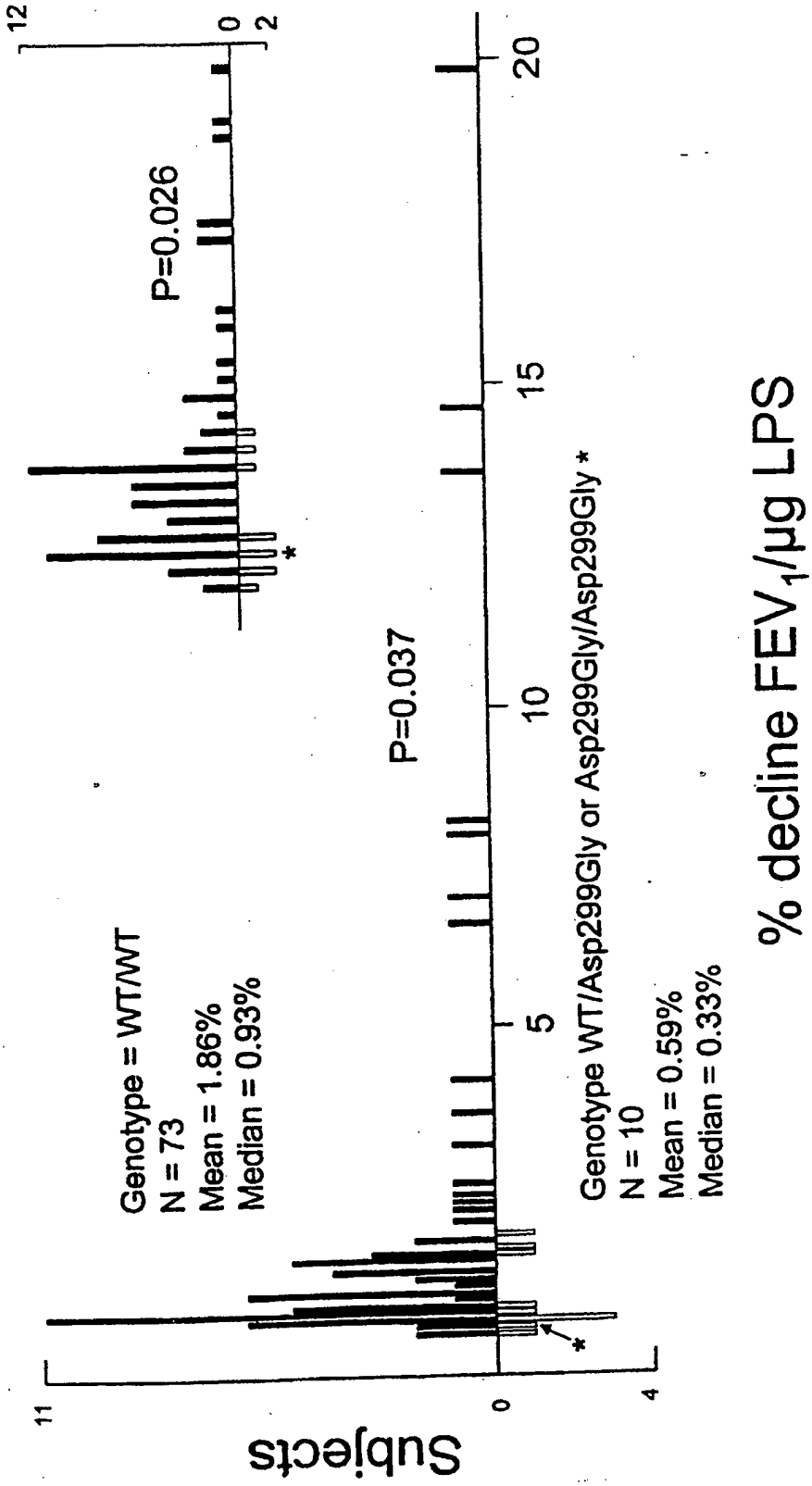

Subjects
% decline FEV1/µg LPS
Genotype = WT/WT
N = 73
Mean = 1.86%
Median = 0.93%
P=0.026
Genotype WT/Asp299Gly or Asp299Gly/Asp299Gly *
N = 10
Mean = 0.59%
Median = 0.33%
P=0.037
11
0
4
12
0
2
5
10
15
20

FIG. 5

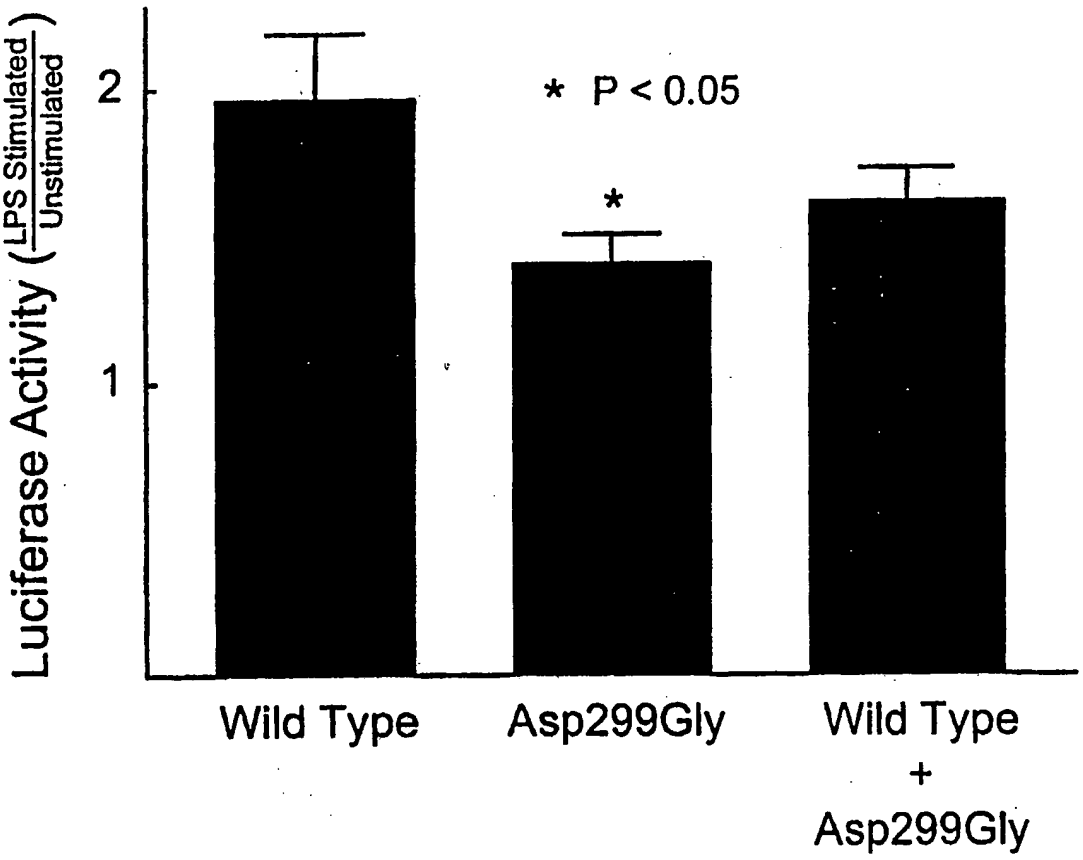

Luciferase Activity (LPS Stimulated / Unstimulated)
2
1
* P < 0.05
*
Wild Type
Asp299Gly
Wild Type + Asp299Gly

FIG. 6A

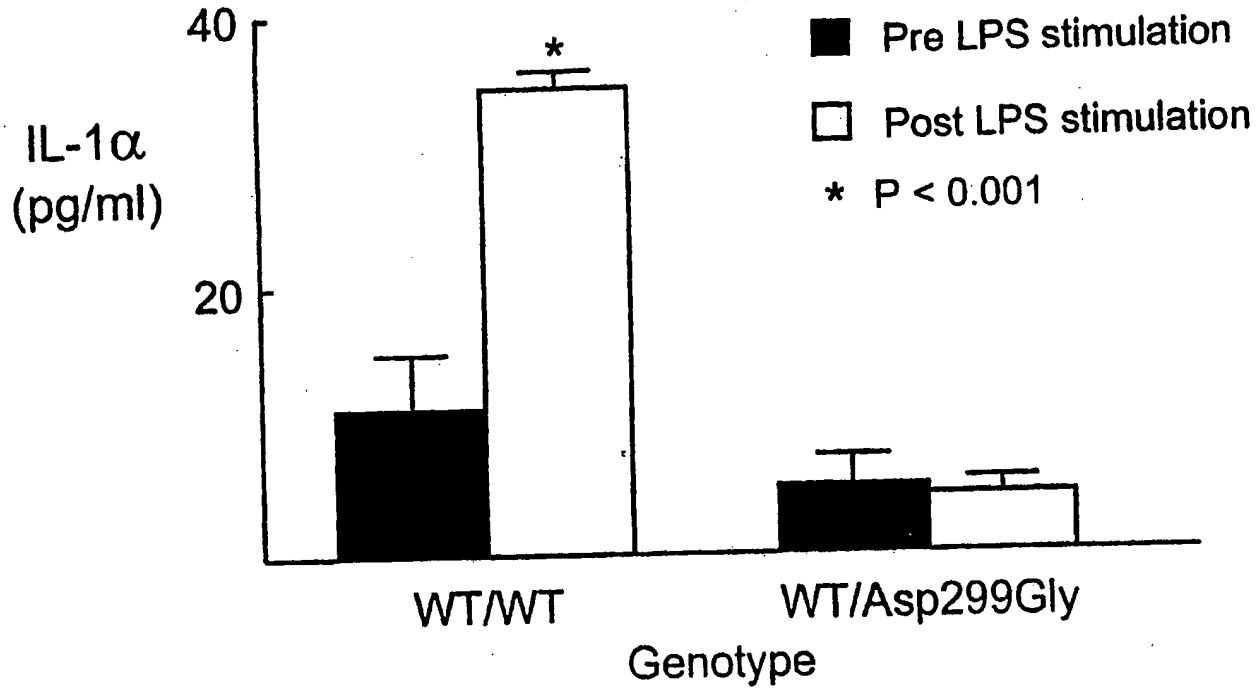

40
20
IL-1α
(pg/ml)
*
Pre LPS stimulation
Post LPS stimulation
* P < 0.001
WT/WT
WT/Asp299Gly
Genotype

FIG. 6B

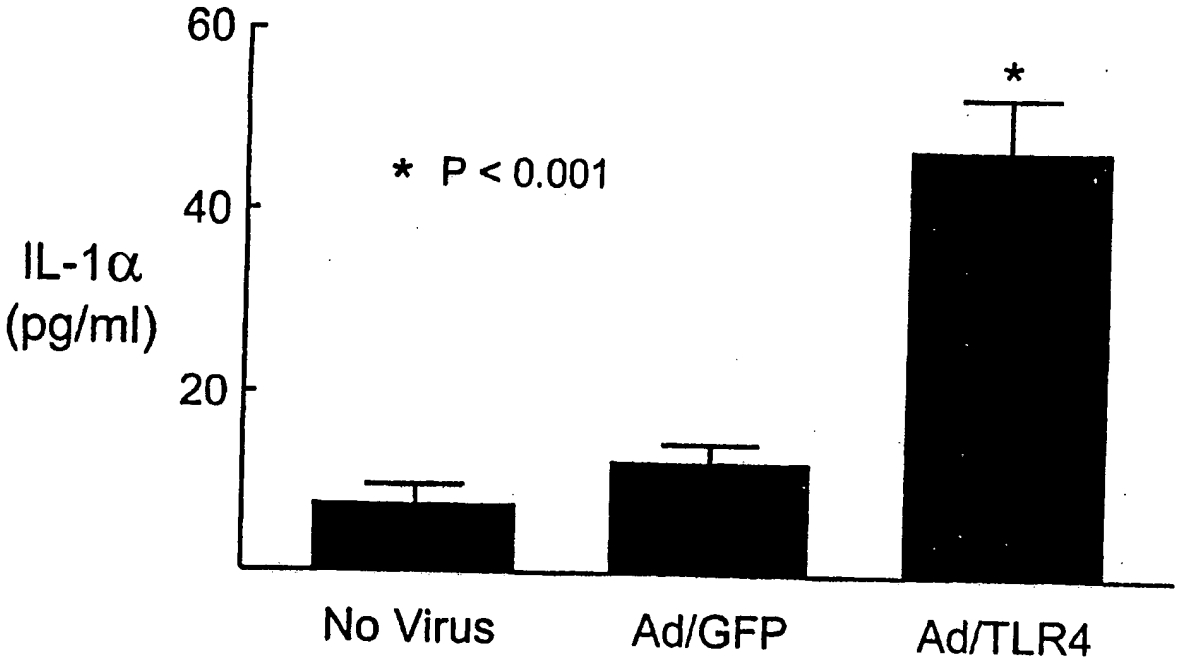


FIG. 6C

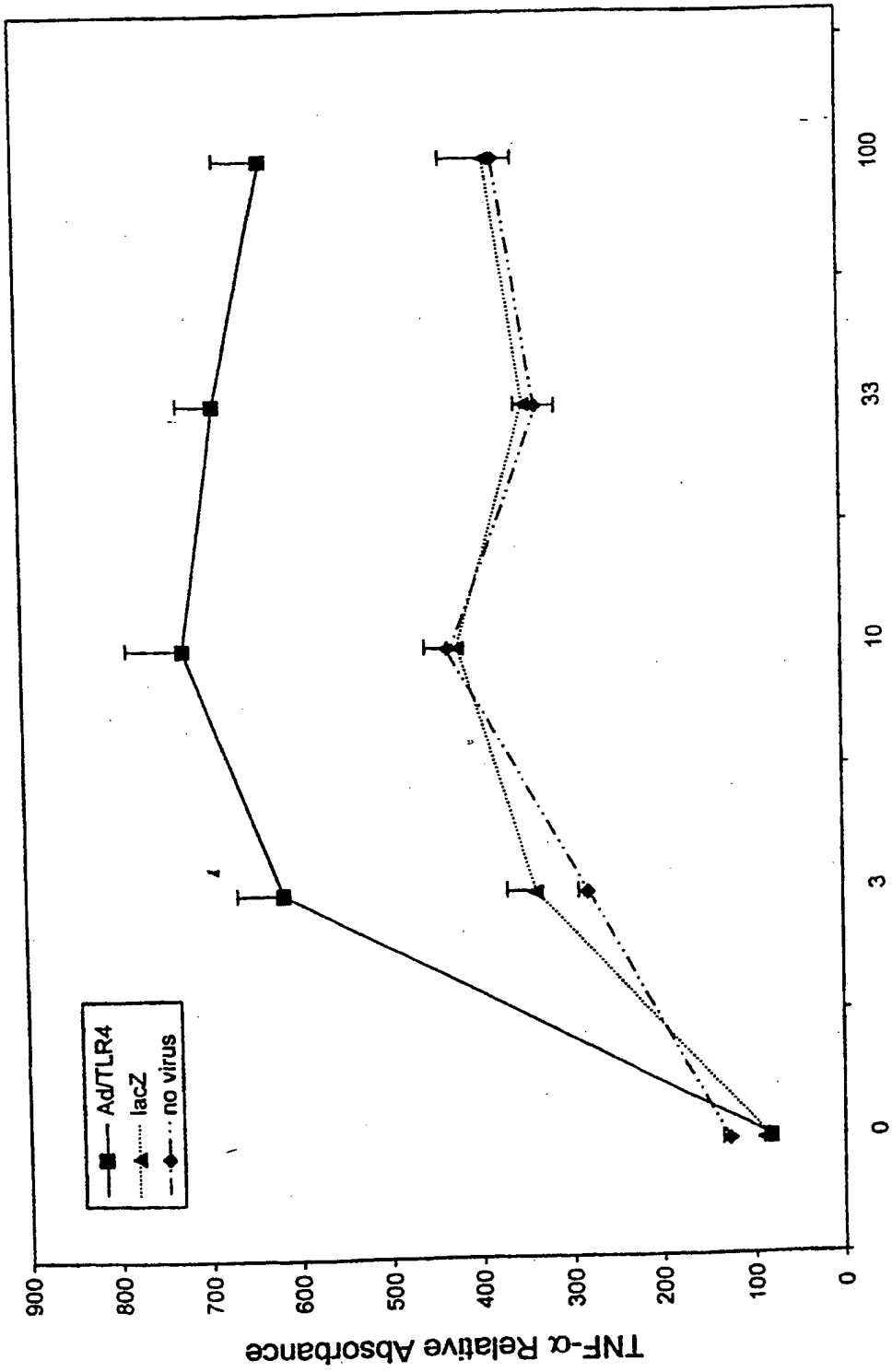

TNF-α Relative Absorbance
900
800
700
600
500
400
300
200
100
0
Ad/TLR4
lacZ
no virus
0
3
10
33
100
LPS concentration ng/ml

FIG. 6D

Amino Acid	Codon
Phe	UUU, UUC
Ser	UCU, UCC, UCA, UCG, AGU, AGC
Tyr	UAU, UAC
Cys	UGU, UGC
Leu	UUA, UUG, CUU, CUC, CUA, CUG
Trp	UGG
Pro	CCU, CCC, CCA, CCG
His	CAU, CAC
Arg	CGU, CGC, CGA, CGG, AGA, AGG
Gln	CAA, CAG
Ile	AUU, AUC, AUA
Thr	ACU, ACC, ACA, ACG
Asn	AAU, AAC
Lys	AAA, AAG
Met	AUG
Val	GUU, GUC, GUA, GUG
Ala	GCU, GCC, GCA, GCG
Asp	GAU, GAC
Gly	GGU, GGC, GGA, GGG
Glu	GAA, GAG

FIG. 7

Original Residue	Exemplary Substitutions	Preferred Substitutions
Ala (A)	val; leu; ile	val
Arg (R)	lys; gln; asn	lys
Asn (N)	gln; his; lys; arg	gln
Asp (D)	glu	glu
Cys (C)	ser	ser
Gln (Q)	asn	asn
Glu (E)	asp	asp
Gly (G)	pro	pro
His (H)	asn; gln; lys; arg	arg
Ile (I)	leu; val; met; ala; phe norleucine	leu
Leu (L)	norleucine; ile; val; met; ala; phe	ile
Lys (K)	arg; gln; asn	arg
Met (M)	leu; phe; ile	leu
Phe (F)	leu; val; ile; ala	leu
Pro (P)	gly	gly
Ser (S)	thr	thr
Thr (T)	ser	ser
Trp (W)	tyr	tyr
Tyr (Y)	trp; phe; thr; ser	phe
Val (V)	ile; leu; met; phe; ala; norleucine	leu

FIG. 8

HUMAN TLR4 GENOMIC SEQUENCE

AAAATACTCC CTTGCCTCAA AAACTGCTCG GTCAAACGGT
GATAGCAAAC CACGCATTCA CAGGGCCACT GCTGCTCACA
AAACCAGTGA GGATGATGCC AGGATGATGT CTGCCTCGCG
CCTGGCTGGG ACTCTGATCC CAGCCATGGC CTTCCTCTCC
TGCGTGAGAC CAGAAAGCTG GGAGCCCTGC GTGGAGGTAT
GTGGCTGGAG TCAGCTCCTC TGAACTTTCC CTCACTTCTG
CCCAGAACTT CTCACTGTGT GCCCTGGTTT GTTTATTTTT
GCAAAAAAAA AAAGAGTTAA ATTACCTTAA AGACTCAAGA
AGCCACAGAG ATCAAATAAT TCATTGTTAC AGGGCACTAG
AGGCAGCCAT TGGGGGTTTG TTCCATTTGG AAATTTTGAG
TGCTAACAGG GGCATGAGAT AACATAGATC TGCTTAAGGT
CCCTGCTCTG CTACCTTGTG GCTCTGTGAA GAAATTATCA
AACCTGTCTG AGACTAGTTT TCGCATCTGT AAGAGAATTA
TAATACCTTC TTCACTAGAG AGTAAGCAGA CTGCTTCAGT
GTCATTTCTT CCCACTGGTG GTCTTTACAC TCAGCTTCAA
GCAGTCACCC TGCTCCTTTC AATCTCAGGA AAAAGATGGC
TTTGTGTGTG TGTCTCT:A: G:AGAAAGAA CTTTCTAAGT
TGGTGCAGA CTTCTGTATG CAGTAATATA GTTTAGTCCA
GAGGATGAAA AAAATAAGAG A:ATGAAAAA GGAAAAGAGA
GAGAGAGA:G AAGAAAAAAG CAAGAGGGAA AT:ATGTATA
ATGTCAGCTA ATGCAAC:AG TTTCTTTCTT AGTGAAATAC
CAATCAGCTG :GTTG:GTAA TCTT:ATTCA TGATGGATCT
CTTTTGTTTT TCCCCTGCGC AGACTTC:AC AGTTGCTTTA
GAAACCCATA GTAGAGCCGA A:CAGCTAAG AAAATGATTT
ACAGTGAGGC AGGGTCAGAA ACTCAAGAGA GAAAAAGCCA
GCTGCAGTC: CTGAAGT:TG AGGATATAGG :AGAAAATCA
AGTAATATTT AGCAAAGACT AATTCATTAT CTTGAAGCCA
TCCCTTCCCT CAATTCCCTG CCCATAGTCC TCCTCCTTGT
CCTCTTCTCT GNA:TCCCTC TGCTGTTAGG TTA:ATGG:A
GATAGATTTT CTAATTANGC TCACTGCGAG ATAAAACCCA
GCCCATGTTT CTATTAGNCA ATATTGTCTT TGAGGCTCCA
TGGCTTGCAN CATTTAAGCA GACATACGAA TGAAGATCTG
CATGTTTGAA CTCTGACTTT GCGCATATTA CTTCATTTCT
TTGAATTTCC ATTTTCCTCA TCTTTAAATG CTTATTTGAA
GATTAAGTGA AAGTATATAA CAAACAAGAA CTATGCAGGC
GTATGGTAAG GGATTAATGA TAGATGATAA TAATTAATGT
TGACATCTAT TGATCACTTA TACTGTAGCG GGCTTTTAAA
TAAACTCTTT AAACACCTTA TCTCATTTAA TCCTTCAAAC
ATTCTATTGG TTTCAAACAA CAGAAAACTA CAATTAGCTG
GCTTCTGCAA GGAATTTTGT TGGAGGAAAT GAGAGCATTC
AGAAATTAGA TGGGAGCGTT AGAGAATTAG GCTTACAAAG
AATGTGGGAA AGTAGGCTAG AAAGCAGTGT AAAAACAAAG
ACAGCATAAA GCACTTGACC TTATTTACTA GGTTCCACCA
TGGGAATCCA TGCACTCTAA AGATTTCCCC CTATTTCTAC
ATCACTTTGC TCAAGGGTCA ATGAGCCAAG GAAAAGAATG

FIG. 9A

CAGTTGTCAA AATCTGGGCC ATGACTAAGG AAGGTCTGGA
CATCTTGACT GCCAGACAGT CTCCCCAATG ATATGGAGTA
TTTAGAATGA TACTGGATAT TTTATTTATT TTTTGTATTT
TCAACTTTTA AGTTCAGAGG CACATGTGCA GAGCATGCAG
GTTTATTACA TAAGTAAATG TGTGCCATGG TGATTTGCTG
CATAGATCAT GAAAATATGG AACGCATCAT GGATTTGTGT
GTCATCCTTG TGCAGGGGCC ATGCTCATCT TCTCTGTATC
CTTCCAATTT TAGTATATGT GCTACTGCAG CAAGCACGAT
ATTGGATATT TTATTACCTA CATTTTACAT ATGATAAAAT
GAGGCTCACT GAGGTTTTTC TTTTGTTCGT TTTATTTTGT
TTTGTTTTTA AAGACTTGGC CCTAAACCAC ACAGAAGAGC
TGGCATGAAA CCCAGAGCTT TCAGACTCCG GAGCCTCAGC
CCTTCACCCC GATTCCATTG CTTCTTGCTA AATGCTGCCG
TTTTATCNCG GAGGTTAGAA TGCTGAGCAC GTAGTAGGTG
CTCTTTACTT TCTAATCTAG AGTAAGACAA TTTATAAGCA
TGAATTGAGT GAATGGATGG ATGGATATAT GGATGGAAGG
ATGGACAGAT GGATGAAAGG TTGACTGAAT TTTGTGCTTG
CACAAAAAGA GGCCCCTCTC CACCATCTCT GGTCTAGGAG
AGGGGAGTTG GGAGACCATG CAGTAAAGAT ACTTCATGTC
ATGTGTAATC ATTGCAGGTG GTTCCTAATA TTACTTATCA
ATGCATGGAG CTGAATTTCT ACAAAATCCC CGACAACCTC
CCCTTCTCAA CCAAGAACCT GGACCTGAGC TTTAATCCCC
TGAGGCATTT AGGCAGCTAT AGCTTCTTCA GTTTCCCAGA
ACTGCAGGTG CTGGATTTAT CCAGGTAATG AATCCACTTT
TACATACTGC ACAAGGTGAG GTGTTCATTG TCCTATCATT
TCATTATTGG ACTGGAAAGC TTGGTTTGTG GAGTCTCATC
TTCATTCACT TATTCATTCA TACAACAGAT GTCTTATTAA
CTATATAACC TTGAGCAAGC TACCTCTATT CTCCAGGTCT
CAGTTTTCTA ATCTGTGAAG TAGGCAGTTG GCTGAGACAG
CTTCTAAGGG CAATTCTAAT TTTAGGTTTT CTTTTAAGAC
AGGAGAGAAA ATTAGCTTAA ATTCTTTCAT AAGCAGCTAT
TTATTGACTA CTTGCTATAT GTTGTACACT CTGCAAGAAG
ACAGGCATAT ATTGATATAT AACACACAGC CCCTGTTGTT
AAGGAGGCAT ATCTTCTTGA AAGAGTTAAT ACCTTAAAGT
CCTGGGTATG GTCCTGGGTA CATAGTATAT AGTCAACACA
TTTTAATTAT GATTTTTTGG ATCTGGAAAC TGATATAAAG
ATAGCGACAT ATAACAGTAG GTGATAAATT ATGTTTAAAC
TAAAGGTAAC TAATTGTATT TTTCAGAAGA GGGGCCTTCT
CTGTGGTGGG TAGTCAAGAA AGATTCATGA ACTGCATAAG
ATTCAAACAA TGTCTAGAAT ATTAAAACTA GTGGTGGCAG
GTGAAATGTC ATCTTGATAT TTTAGGGGAA CCAAATTCTA
AAAGGGTTTT CATCATCGGG GCCTTATTTG CAAATCGAAC
TAGATAATGG ATCATGTTCT CTGCAATGGT TTGTAAAACA
TTTCAAAACA TTTTACATAT TTTTTATTAT AGAAATTATT
GATAAAGACT AAGGTCACAG TATAAAAATC CTTTTTAGAG
CAGACATTTC TGTAGAAGAG TGAACATATG ACCTATTATA
CTCTAATTTG GATATAGATA GGATGTAACA AAGGAGTAAT

FIG. 9A (Continued)

GGGAACAATT CAAAGGCAGT GGTATAGTGC ATANAGTCCT
GTTGGGGTCA GAAGACCTGA GCCCAAGTTT ACCCCCAACA
TTTATAACCC ATGTAACCTT AGCATATTAC TTCATCTCCC
TTAATCCTTA GTTTCATATC TGATCAATGG AAATGATGAA
ACTTATTCTG CTGGATTAAA TGTGATAATA AATATTAATA
TGCTGTATAT ATTTAAATTT TTATAAAATA TATTTTATAA
GCATAAAGTA TTCTTACAGA ATTTCATTAG GTTTTTAAAA
TAATTTCAAC TTTTATTTTT GATTCAGGGA TTTACATGGT
TATATTGCGT AATGCTGAGG TGTAGGGTAC AATCGATACC
ATCACTCAGG TAGTGAGCAT AGTACCCAAT AGTTAGTTTT
TCAACCCTTG CTGCTTTCTC TCTATCCCCT CTCTAGTAAT
CCCCAGGGTC TATTTTTGTC ATCTTTATGT CCATGTGTAC
TCCATGTTTG GATCCTACTT ATAAAGTGAG AACTCATGGT
ATTTGGCTTT CTGTNCCTTT GTTNGCTAAT TTGCTTAGGA
TAATGGCTAC TAGCTGCATC TATGCCATTA TGTTCTAAAT
TTCANTTNCC TGCATGAAAA TTTTGTCAAG TACTCTATTA
AGGTAGACCA CCTCTCCCTT TTTTTTTCAA ACAAGAAGTA
GNTTTTCCCA AACAATGCCC TTATGGAATT NATCTTCAAT
CCNNGGATAC CCAATAACTT GCCCCAAANC CTTAATCTGN
CTTACAGAGA GGCCACCTTC CTTCTGTAAC CCATAGGAGA
TTTGGATTGG TAAGAATGCT TTGTGATAGC CCAGCAGCCT
TCTTTCCCCT ATAGAAATAT ATATATANTC TTTTTATAGG
TGAGGAACTG AAGCTTGAAT AATTTAAATG ACTTATATAC
ATNATCATTG CTTGTTAGCC ACAGACCAGA GATTTAAGTT
CNCATCTCCA GAATCCAACT TAAATGTTTT CTTTGTCTTA
ATACTCTACT TCTCTAAAGT GATTATCACC AATGTAATGA
TATAGAGNCA CAGCAAGACC CTTTCCTTCT CACCTAATGT
ATAGAGCAAT GCAGAGATAG AATGATGGGC TATAACAATC
ATATAATTGA AAGAAAGAAC TTCAAAAATA ATCAAGTTCA
GCTGTTTGAT TTATAAATGT GATAACTAAA ACCTAGAGAG
GAAAAGAGGT ACTCAAGATC ACACAGTAGG AGAGGACTGC
AGAAACACCA AACCCAAGCT CTTTTGTCCA CTCTTCCAGC
GTTCTTTCTA CTATACTGCC TATCCTTTAT CTAGTTACCA
ATAAATAACA AAAGCTTGGA CCACAATGCT TTTATTGTCT
AGGAAACTCC TGAAGAAGCT AAATAAAATG GGTGGGGAAT
ATTGTAAATG TAATTCAGGC TGGATTAAGA AAGAACTTAT
TTGACATTGT AACTGACAAG CACCTGCAAT GCTGAAAGGA
ATTTTTCATT GGCNTGCTGT TTGCTGGGCT GCATCAAAGC
CCTGTCTCTA GGACATGTCT CTGAACATTG TGTGTAGCAT
GGCTTTCATT TCTTTTAGGA TAAAATTCAA AACCCTTTAT
CTGGTTGGTA AACCTCTGCC TAATTGGGAA CCTTCTTTCT
CCACAACTCC ATATTGTACA CTCCAATTTC ATCTCTGTTC
TCCAACCATG GAAGCTATTT GTCATGATTC CTCCTTGTGT
CATTTTTTTT CTGTCAACCT TGGGGCTTTT GTGTTTGCTG
TTCACTTCAC CTCCTTTTAT TGTTAACTTC TACTCATCTT
TCAATTTTCA ACTTAAGTGT TCTCAGAGAA ACCTACTTTG
ATTTTCTTGG TCCANAACGG TTCTCTGGAT GTGAACTCTT

FIG. 9A (Continued)

ATAGCACATA ATTTTCACTT TTTTCCACAA AACTCGCTCC
TATCACCTGT TACAAGCATT TACCTCTGAT AACAAGAACT
TTCAAATATC TAGCTGTCAT GTAAGCACTT TTCATAAACA
TTAAGAGTAT CTGTGACACT TATGTGTAAT GTTTCGTATC
TCTGAAATTG ATATTTACCA GTCATTTATC TTGGCTACCA
ACTAACAACT ATCCATATTA TCTGTACCAA TCAGATGTAT
AATCACAATT TTGTGTGACA GAAAATGGCT AAACTTGATC
CAAGGCTATT ACATGCTTT: ATCAACTGCA CAATCTTTAT
ATATGTCAAT TATTGATCTT TAACTGATTT CCTTCTTATG
:GATTTTCTC CTCTGCTTAT CATGTATGCC TAACAT:GAC
AAAAAAG:AG CCTA:TCATT GCAGCCAGTA TGATAATACT
CA:GTCTGTG GGGCTTCTTA TTTGCTTAT: TCCATCATCA
TCTGTCCTGC TTGATGTCTT TGCCTATGCA CAATCATATG
:ACCCATCAC ATCTGTATGA AGAGC:TGGA TGACTAGGAT
TAATATTCT: AT:::TTTAG GTTCTTATT: CAGCAGAAAT
ATTAGATAA: TCAATGTCTT TTTATTCCTG TAGGTGTGAA
ATCCAGACAA TTGAAGATGG GGCATATCAG AGCCT:AAGC
CACCTCTCTA CCTTAATATT GACAGGAAAC CCCATCCAGA
GTTTAGCCCT GGGAGCCTTT TCTGGACTAT CAAGTTTACA
GAAGCTGGTG GCTGTGGAGA CAAATCTAGC ATCTCTAGAG
AACTTCCCCA TTGGACATCT CAAAACTTTG AAAGAACTTA
ATGTGGCTCA CAATCTTATC CAATCTTTCA AATTACCTGA
GTATTTTTCT AATCTGACCA ATCTAGAGCA CTTGGACCTT
TCCAGCAACA AGATTCAAAG TATTTATTGC ACAGACTTGC
GGGTTCTACA TCAAATGCCC CTACTCAATC TCTCTTTAGA
CCTGTCCCTG AACCCTATGA ACTTTATCCA ACCAGGTGCA
TTTAAAGAAA TTAGGCTTCA TAAGCTGACT TTAAGAAATA
ATTTTGATAG TTTAAATGTA ATGAAAACTT GTATTCAAGG
TCTGGCTGGT TTAGAAGTCC ATCGTTTGGT TCTGGGAGAA
TTTAGAAATG AAGGAAACTT GGAAAAGTTT GACAAATCTG
CTCTAGAGGG CCTGTGCAAT TTGACCATTG AAGAATTCCC
GATTAGCATA CTTAGACTAC TACCTCGATG ATATTATTGA
CTTATTTAAT TGGTTGACAA ATGGTTCTTC ATTTTCCCTG
GTGAGTGTGA CTATTGAAAG GGTAAAAGAC TTTTCTTATA
ATTTCGGATG GCAACATTTA GAATTAGTTA ACTGTAAATT
TGGACAGTTT CCCACATTGA AACTCAAATC TCTCAAAAGG
CTTACTTTCA CTTCCAACAA AGGTGGGAAT GCTTTTTCAG
AAGTTGATCT ACCAAGCCTT GAGTTTCTAG ATCTCAGTAG
AAATGGCTTG AGTTTCAAAG GTTGCTGTTC TCAAAGTGAT
TTTGGGACAA CCA:GCCT:A AAGTATTTAG ATCTGAGCTT
CAATGGTGTT A:TTACCATG AGTTCAAACT TCTTGGGCTT
AGAACA:ACT AGAACATCTG GATTTCCAGC ATTCCAATTT
GAAACA:AAT GAGTGAGTTT TCAGTATTCC TA:TCACTCA
GAAA:CCT:C ATTTACCTTG ACATTTCTCA TACTCACACC
AGAGTTGCTT TCAATGGCAT CTTCAATGGC TTGTCCAGTC
TCGAAGTCTT GAAAATGGCT GGCAATTCTT TCCAGGAAAA
CTTCCTTCCA GATATCTTCA CAGAGCTGAG AAACTTGACC

FIG. 9A (Continued)

TTCCTGGACC TCTCTCAGTG TCAACTGGAG CAGTTGTCTC
CAACAGCATT TAACTCACTC TCCAGTCTTC AGGTACTAAA
TATGAGCCAC AACAACTTCT TTTCATTGGA TACGTTTCCT
TATAAGTGTC TGAACTCCCT CCAGGTTCTT GATTACAGTC
TCAATCACAT AATGACTTCC AAAAAACAGG AACTACAGCA
TTTTCCAAGT AGTCTAGCTT TCTTAAATCT TACTCAGAAT
GACTTTGCTT GTACTTGTGA ACACCAGAGT TTCCTGCAAT
GGATCAAGGA CCAGAGGCAG CTCTTGGTGG AAGTTGAACG
AATGGAATGT GCAACACCTT CAGATAAGCA GGGCATGCCT
GTGCTGAGTT TGAATATCAC CTGTCAGATG AATAAGACCA
TCATTGGTGT GTCGGTCCTC AGTGTGCTTG TAGTATCTGT
TGTAGCAGTT CTGGTCTATA AGTTCTATTT TCACCTGATG
CTTCTTGCTG GCTGCATAAA GTATGGTAGA GGTGAAAACA
TCTATGATGC CTTTGTTATC TACTCAAGCC AGGATGAGGA
CTGGGTAAGG AATGAGCTAG TAAAGAATTT AGAAGAAGGG
GTGCCTCCAT TTCAGCTCTG CCTTCACTAC AGAGACTTTA
TTCCCGGTGT GGCCATTGCT GCCAACATCA TCCATGAAGG
TTTCCATAAA AGCCGAAAGG TGATTGTTGT GGTGTCCCAG
CACTTCATCC AGAGCCGCTG GTGTATCTTT GAATATGAGA
TTGCTCAGAC CTGGCAGTTT CTGAGCAGTC GTGCTGGTAT
CATCTTCATT GTCCTGCAGA AGGTGGAGAA GACCCTGCTC
AGGCAGCAGG TGGAGCTGTA CCGCCTTCTC AGCAGGAACA
CTTACCTGGA GTGGGAGGAC AGTGTCCTGG GGCGGCACAT
CTTCTGGAGA CGACTCAGAA AAGCCCTGCT GGATGGTAAA
TCATGGAATC CAGAAGGAAC AGTGGGTACA GGATGCAATT
GGCAGGAAGC AACATCTATC TGAAGAGGAA AAATAAAAAC
CTCCTGAGGC ATTTCTTGCC CAGCTGGGTC CAACACTTGT
TCAGTTAATA AGTATTAAAT GCTGCCACAT GTCAGGCCTT
ATGCTAAGGG TGAGTAATTC CATGGTGCAC TAGATATGCA
GGGCTGCTAA TCTCAAGGAG CTTCCAGTGC AGAGGGAATA
AATGCTAGAC TAAAATACAG AGTCTTCCAG GTGGGCATTT
CAACCAACTC AGTCAAGGAA CCCATGACAA AGAAAGTCAT
TTCAACTCTT ACCTCATCAA GTTGAATAAA GACAGAGAAA
ACAGAAAGAG ACATTGTTCT TTTCCTGAGT CTTTTGAATG
GAAATTGTAT TATGTTATAG CCATCATAAA ACCATTTTGG
TAGTTTTGAC TGAACTGGGT GTTCACTTTT TCCTTTTTGA
TTGAATACAA TTTAAATTCT ACTTGATGAC TGCAGTCGTC
AAGGGGCTCC TGATGCAAGA TGCCCCTTCC ATTTTAAGTC
TGTCTCCTTA CAGAGGTTAA AGTCTAGTGG CTAATTCCTA
AGGAAACCTG ATTAACACAT GCTCACAACC ATCCTGGTCA
TTCTCGAGCA TGTTCTATTT TTTAACTAAT CACCCCTGAT
ATATTTTTAT TTTTATATAT CCAGTTTTCA TTTTTTTACG
TCTTGCCTAT AAGCTAATAT CATAAATAAG GTTGTTTAAG
ACGTGCTTCA AATATCCATA TTAACCACTA TTTTTCAAGG
AAGTATGGAA AAGTACACTC TGTCACTTTG TCACTCGATG
TCATTCCAAA GTTATTGCCT ACTAAGTAAT GACTGTCATG
AAAGCAGCAT TGAAATAATT TGTTTAAAGG GGGCACTCTT

FIG. 9A (Continued)

TTAAACGGGA AGAAAATTTC CGCTTCCTGG TCTTATCATG
GACAATTTGG GCTATAGGCA TGAAGGAAGT GGGATTACCT
CAGGAAGTCA CCTTTTCTTG ATTCCAGAAA CATATGGGCT
GATAAACCCG GGGTGACCTC ATGAAATGAG TTGCAGCAGA
TGTTTATTTT TTTCAGAACA AGTGATGTTT GATGGACCTA
TGAATCTATT TAGGGAGACA CAGATGGCTG GGATCCCTCC
CCTGTACCCT TCTCACTGCC AGGAGAACTA CGTGTGAAGG
TATTCAAGGC AGGGAGTATA CATTGCTGTT TCCTGTTGGG
CAATGCTCCT TGACCACATT TTGGGAAGAG TGGATGTTAT
CATTGAGAAA ACAATGTGTC TGGAATTAAT GGGGTTCTTA
TAAAGAAGGT TCCCAGAAAA GAATGTTCAT TCCAGCTTCT
TCAGGAAACA GGAACATTCA AGGAAAAGGA CAATCAGGAT
GTCATCAGGG AAATGAAAAT AAAAACCACA ATGAGATATC
ACCTTATACC AGGTAGATGG CTACTATAAA AAAATGAAGT
GTCATCAAGG ATATAGAGAA ATTGGAACCC TTCTTCACTG
CTGGAGGGAA TGGAAAATGG TGTAGCCGTT ATGAAAAACA
GTACGGAGGT TTCTCAAAAA TTAAAAATAG AACTGCTATA
TGATCCAGCA ATCTCACTTC TGTATATATA CCCAAAATAA
TTGAAATCAG AATTTCAAGA AAATATTTAC ACTCCCATGT
TCATTGTGGC ACTCTTCACA ATCACTGTTT CCAAAGTTAT
GGAAACAACC CAAATTTCCA TTGGAAAATA AATGGACAAA
GGAAATGTGC ATATAACGTA CAATGGGGAT ATTATTCAGC
CTAAAAAAAG GGGGGATCCT GTTATTTATG ACAACATGAA
TAAACCCGGA GGCCATTATG CTATGTAAAA TGAGCAAGTA
ACAGAAAGAC AAATACTGCC TGATTTCATT TATATGAGGT
TCTAAAATAG TCAAACTCAT AGAAGCAGAG AATAGAACAG
TGGTTCCTAG GGAAAAGGAG GAAGGGAGAA ATGAGGAAAT
AGGGAGTTGT CTAATTGGTA TAAAATTATA GTATGCAAGA
TGAATTAGCT CTAAAGATCA GCTGTATAGC AGAGTTCGTA
TAATGAACAA TACTGTATTA TGCACTTAAC ATTTTGTTAA
GAGGGTACCT CTCATGTTAA GTGTTCTTAC CATATACATA
TACACAAGGA AGCTTTTGGA GGTGATGGAT ATATTTATTA
CCTTGATTGT GGTGATGGTT TGACAGGTAT GTGACTATGT
CTAAACTCAT CAAATTGTAT ACATTAAATA TATGCAGTTT
TATAATATCA AAAAAAAAAA AAAAAAAA

FIG. 9A (Continued)

NEW SHEET

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   1  TTCCACTTCT AAGAGCTGCC TAGAGTAGTC AAGATTATAG AGACAAAAGT
  51  AGTGCATAGA TTCAAGGGCC TAGGGAAAGG GGAAATGGGG AGTTATTTAT
 101  TAATGAATAG TGGTGATGAT TGTACAAAAA TATGAACATA ATTAATGCCA
 151  CTAAATTGTN CACATACAAA TGGTCAAGAT AATAAATTTT ATGTTATGTC
 201  ATGTTATGTT ATGTGATTTT ACCATAATAC AGAAAATGAA AAAAGAAAAG
 251  AAAGAAAGTA AAGCTTAGCG GTTTNCATGA CTTGNCCAAT GCCTCAAAGC
 301  CATGAGTCGA CCCAGCTGAG ATCTGANCTT CAGTATATTC CATTCTGAAA
 351  TCCCAGACTT TTCCCAATCT TCTTGTACTT TTCAAACTGT GTTTCAGTTG
 401  AGGTTTATTT TCAGTTTTGT ATGTGAGTTT CTTCGCAAGA AGGGCGGGCC
 451  AAATTGTGTC CTGCAAAAAC CTACATATCG AAGTCCTAAC CCCTCTACCT
 501  CAGACTATGA CTGTATATGG AGAGAGAGCC TTGAAAGAGG TATGTAAGGT
 551  AGAATGAGGT CATTATGGTG GGCCCTAATC CAACATAACT GGTGTCCTTA
 601  TAAGAAGGGG AGATTAGAAT TCAGACACAC TTGCTGACAC CTTGAGTTCA
 651  GACTGGAAGC CTCTAGAATT GTGAGAAAAT GAATGTCTGT TGTTTAAGCC
 701  ACCCAGTCTG TGGTATTTCC TTATGGCAGC CCCAGCAAAC TAATACAAAT
 751  AGTGTTTCCA CAGCTGAAAC AAAATTGGAA AATCACCGTC ATCCTAGAGA
 801  GTTACAAGGG CTATTTTAAT AGAACCTGAT TGTTTTCCTA AATTCACCAA
 851  GCCCAGGCAG AGGTCAGATG ACTAATTGGG ATAAAAGCCA ACTAGCTTCC
 901  TCTTGCTGTT TCTTTAGCCA CTGGTCTGCA GGCGTTTTCT TCTTCTAACT
 951  TCCTCTCCTG TGACAAAAGA GATAACTATT AGAGAAACAA AAGTCCAGAA
1001  TGCTAAGGTT GCCGCTTTCA CTTCCTCTCA CCCTTTAGCC CAGAACTGCT
1051  TTGAATACAC CAATTGCTGT GGGGCGGCTC GAGGAAGAGA AGACACCAGT
1101  GCCTCAGAAA CTGCTCGGTC AGACGGTGAT AGCGAGCCAC GCATTCACAG
1151  GGCCACTGCT GCTCACAGAA GCAGTGAGGA TGATGCCAGG ATGATGTCTG
1201  CCTCGCGCCT GGCTGGGACT CTGATCCCAG CCATGGCCTT CCTCTCCTGC
1251  GTGAGACCAG AAAGCTGGGA GCCCTGCGTG GAGGTATGTG GCTGGAGTCA
1301  GCTCCTCTGA ACTTTCCCTC ACTTCTGCCC AGAACTTCTC ACTGTGTGCC
1351  CTGGTTTGTT
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FIG. 9B

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   1  CGCATCATGG ATTTGTGTGT CATCCTTGTG CAGGGGCCAT GCTCATCTTC
  51  TCTGTATCCT TCCAATTTTA GTATATGTGC TACTGCAGCA AGCACGATAT
 101  TGGATATTTT ATTACCTACA TTTTACATAT GATAAAATGA GGCTCACTGA
 151  GGTTTTTCTT TTGTTCGTTT TATTTTGTTT TGTTTTTAAA GACTTGGCCC
 201  TAAACCACAC AGAAGAGCTG GCATGAAACC CAGAGCTTTC AGACTCCGGA
 251  GCCTCAGCCC TTCACCCCGA TTCCATTGCT TCTTGCTAAA TGCTGCCGTT
 301  TTATCACGGA GGTTAGAATG CTGAGCACGT AGTAGGTGCT CTTTACTTTC
 351  TAATCTAGAG TAAGACAATT TATAAGCATG AATTGAGTGA ATGGATGGAT
 401  GGATATATGG ATGGAAGGAT GGACAGATGG ATGAAAGGTT GACTGAATTT
 451  TGTGCTTGCA CAAAAAGAGG CCCCTCTCCA CCATCTCTGG TCTAGGAGAG
 501  GGGAGTTGGG AGACCATGCA GTAAAGATAC TTCATGTCAT GTGTAATCAT
 551  TGCAGGTGGT TCCTAATATT ACTTATCAAT GCATGGAGCT GAATTTCTAC
 601  AAAATCCCCG ACAACCTCCC CTTCTCAACC AAGAACCTGG ACCTGAGCTT
 651  TAATCCCCTG AGGCATTTAG GCAGCTATAG CTTCTTCAGT TTCCCAGAAC
 701  TGCAGGTGCT GGATTTATCC AGGTAATGAA TCCACTTTTA CATACTGCAC
 751  AAGGTGAGGT GTTCATTGTC CTATCATTTC ATTATTGGAC TGGAAAGCTT
 801  GGTTTGTGGA GTCTCATCTT CATTCACTTA TTCATTCATA CAACAGATGT
 851  CTTATTAACT ATATAACCTT GAGCAAGCTA CCTCTATTCT CCAGGTCTCA
 901  GTTTTCTAAT CTGTGAAGTA GGCAGTTGGC TGAGACAGCT TCTAAGGGCA
 951  ATTCTAATTT TAGGTTTTCT TTTAAGACAG GAGAGAAAAT TAGCTTAAAT
1001  TCTTTCATAA GCAGCTATTT ATTGACTACT TGCTATATGT TGTACACTCT
1051  GCAAGAAGAC AGGCATATAT TGATATATAA CACACAGCCC CTGTTGTTAA
1101  GGAGGCATAT CTTCTTGAAA GAGTTAATAC CTTAAAGTCC TGGGTATGGT
1151  CCTGGGTACA TAGTATATAG TCAACACATT TTAATTATGA TTTTTTGGAT
1201  CTGGAAACTG ATATAAAGAT AGCGACATAT AACAGTAGGT GATAAATTAT
1251  GTTTAAACTA AAGGTAACTA ATTGTATTTT TCAGAAGAGG GGCCTTCTCT
1301  GTGGTGGGTA GTCAAGAAAG ATTCATGAAC TGC
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FIG. 9C

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   1  GGTAAGAATG CTTTGTGATA GCCCAGCAGC CTTCTTTCCC CTATAGAAAT
  51  ATATATATAN TCTTTTTATA GGTGAGGAAC TGAAGCTTGA ATAATTTAAA
 101  TGACTTATAT ACATNATCAT TGCTTGTTAG CCACAGACCA GAGATTTAAG
 151  TTCNCATCTC CAGAATCCAA CTTAAATGTT TTCTTTGTCT TAATACTCTA
 201  CTTCTCTAAA GTGATTATCA CCAATGTAAT GATATAGAGN CACAGCAAGA
 251  CCCTTTCCTT CTCACCTAAT GTATAGAGCA ATGCAGAGAT AGAATGATGG
 301  GCTATAACAA TCATATAATT GAAAGAAAGA ACTTCAAAAA TAATCAAGTT
 351  CAGCTGTTTG ATTTATAAAT GTGATAACTA AAACCTAGAG AGGAAAAGAG
 401  GTACTCAAGA TCACACAGTA GGAGAGGACT GCAGAAACAC CAAACCCAAG
 451  CTCTTTTGTC CACTCTTCCA GCGTTCTTTC TACTATACTG CCTATCCTTT
 501  ATCTAGTTAC CAATAAATAA CAAAAGCTTG GACCACAATG CTTTTATTGT
 551  CTAGGAAACT CCTGAAGAAG CTAAATAAAA TGGGTGGGGA ATATTGTAAA
 601  TGTAATTCAG GCTGGATTAA GAAAGAACTT ATTTGACATT GTAACTGACA
 651  AGCACCTGCA ATGCTGAAAG GAATTTTTCA TTGGCNTGCT GTTTGCTGGG
 701  CTGCATCAAA GCCCTGTCTC TAGGACATGT CTCTGAACAT TGTGTGTAGC
 751  ATGGCTTTCA TTTCTTTTAG GATAAAATTC AAAACCCTTT ATCTGGTTGG
 801  TAAACCTCTG CCTAATTGGG AACCTTCTTT CTCCACAACT CCATATTGTA
 851  CACTCCAATT TCATCTCTGT TCTCCAACCA TGGAAGCTAT TTGTCATGAT
 901  TCCTCCTTGT GTCATTTTTT TTCTGTCAAC CTTGGGGCTT TTGTGTTTGC
 951  TGTTCACTTC ACCTCCTTTT ATTGTTAACT TCTACTCATC TTTCAATTTT
1001  CAACTTAAGT GTTCTCAGAG AAACCTACTT TGATTTTCTT GGTCCANAAC
1051  GGTTCTCTGG ATGTGAACTC TTATAGCACA TAATTTTCAC TTTTTTCCAC
1101  AAAACTCGCT CCTATCACCT GTTACAAGCA TTTACCTCTG ATAACAAGAA
1151  CTTTCAAATA TCTAGCTGTC ATGTAAGCAC TTTTCATAAA CATTAAGAGT
1201  ATCTGTGACA CTTATGTGTA ATGTTTCGTA TCTCTGAAAT TGATATTTAC
1251  CAGTCATTTA TCTTGGCTAC CAACTAACAA CTATCCATAT TATCTGTACC
1301  AATCAGATGT ATAATCACAA TTTTGTGTGA CAGAAAATGG CTAAACTTGA
1351  TCCAAGGCTA TTACATGCTT TATCAACTGC ACAATCTTTA TATATGTCAA
1401  TTATTGATCT TTANCTGATT TCCTTCTTAT GGATTTTCTC CTCTGCTTAT
1451  CATGTATGCC TAACATGACA AAAAAGAGCC TATCATTGCA GCCAGTATGA
1501  TAATACTCAG TCTGTGGGGC TTCTTATTTG CTTATTCCAT CATCATCTGT
1551  CCTGCTTGAT GTCTTTGCCT ATGCACAATC ATATGACCCA TCACATCTGT
1601  ATGAAGAGCT GGATGACTAG GATTAATATT CTATTTTAGG TTCTTATTCA
1651  GCAGAAATAT TAGATAATCA ATGTCTTTTT ATTCCTGTAG GTGTGAAATC
1701  CAGACAATTG AAGATGGGGC ATATCAGAGC CTAAGCCACC TCTCTACCTT
1751  AATATTGACA GGAAACCCCA TCCAGAGTTT AGCCCTGGGA GCCTTTTCTG
1801  GACTATCAAG TTTACAGAAG CTGGTGGCTG TGGAGACAAA TCTAGCATCT
1851  CTAGAGAACT TCCCCATTGG ACATCTCAAA ACTTTGAAAG AACTTAATGT
1901  GGCTCACAAT CTTATCCAAT CTTTCAAATT ACCTGAGTAT TTTTCTAATC
1951  TGACCAATCT AGAGCACTTG GACCTTTCCA GCAACAAGAT TCAAAGTATT
2001  TATTGCACAG ACTTGCGGGT TCTACATCAA ATGCCCCTAC TCAATCTCTC
2051  TTTAGACCTG TCCCTGAACC CTATGAACTT TATCCAACCA GGTGCATTTA
2101  AAGAAATTAG GCTTCATAAG CTGACTTTAA GAAATAATTT TGATAGTTTA
2151  AATGTAATGA AAACTTGTAT TCAAGGTCTG GCTGGTTTAG AAGTCCATCG
2201  TTTGGTTCTG GGAGAATTTA GAAATGAAGG AAACTTGGAA AAGTTTGACA
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FIG. 9D

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2251  AATCTGCTCT AGAGGGCCTG TGCAATTTGA CCATTGAAGA ATTCCGATTA
2301  GCATACTTAG ACTACTACCT CGATGATATT ATTGACTTAT TTAATTGTTT
2351  GACAAATGTT TCTTCATTTT CCCTGGTGAG TGTGACTATT GAAAGGGTAA
2401  AAGACTTTTC TTATAATTTC GGATGGCAAC ATTTAGAATT AGTTAACTGT
2451  AAATTTGGAC AGTTTCCCAC ATTGAAACTC AAATCTCTCA AAAGGCTTAC
2501  TTTCACTTCC AACAAAGGTG GGAATGCTTT TTCAGAAGTT GATCTACCAA
2551  GCCTTGAGTT TCTAGATCTC AGTAGAAATG GCTTGAGTTT CAAAGGTTGC
2601  TGTTCTCAAA GTGATTTTGG GACAACCAGC CTAAAGTATT TAGATCTGAG
2651  CTTCAATGGT GTTATTACCA TGAGTTCAAA CTTCTTGGGC TTAGAACAAC
2701  TAGAACATCT GGATTTCCAG CATTCCAATT TGAAACAAAT GAGTGAGTTT
2751  TCAGTATTCC TATCACTCAG AAACCTCATT TACCTTGACA TTTCTCATAC
2801  TCACACCAGA GTTGCTTTCA ATGGCATCTT CAATGGCTTG TCCAGTCTCG
2851  AAGTCTTGAA AATGGCTGGC AATTCTTTCC AGGAAAACTT CCTTCCAGAT
2901  ATCTTCACAG AGCTGAGAAA CTTGACCTTC CTGGACCTCT CTCAGTGTCA
2951  ACTGGAGCAG TTGTCTCCAA CAGCATTTAA CTCACTCTCC AGTCTTCAGG
3001  TACTAAATAT GAGCCACAAC AACTTCTTTT CATTGGATAC GTTTCCTTAT
3051  AAGTGTCTGA ACTCCCTCCA GGTTCTTGAT TACAGTCTCA ATCACATAAT
3101  GACTTCCAAA AAACAGGAAC TACAGCATTT TCCAAGTAGT CTAGCTTTCT
3151  TAAATCTTAC TCAGAATGAC TTTGCTTGTA CTTGTGAACA CCAGAGTTTC
3201  CTGCAATGGA TCAAGGACCA GAGGCAGCTC TTGGTGGAAG TTGAACGAAT
3251  GGAATGTGCA ACACCTTCAG ATAAGCAGGG CATGCCTGTG CTGAGTTTGA
3301  ATATCACCTG TCAGATGAAT AAGACCATCA TTGGTGTGTC GGTCCTCAGT
3351  GTGCTTGTAG TATCTGTTGT AGCAGTTCTG GTCTATAAGT TCTATTTTCA
3401  CCTGATGCTT CTTGCTGGCT GCATAAAGTA TGGTAGAGGT GAAAACATCT
3451  ATGATGCCTT TGTTATCTAC TCAAGCCAGG ATGAGGACTG GGTAAGGAAT
3501  GAGCTAGTAA AGAATTTAGA AGAAGGGGTG CCTCCATTTC AGCTCTGCCT
3551  TCACTACAGA GACTTTATTC CCGGTGTGGC CATTGCTGCC AACATCATCC
3601  ATGAAGGTTT CCATAAAAGC CGAAAGGTGA TTGTTGTGGT GTCCCAGCAC
3651  TTCATCCAGA GCCGCTGGTG TATCTTTGAA TATGAGATTG CTCAGACCTG
3701  GCAGTTTCTG AGCAGTCGTG CTGGTATCAT CTTCATTGTC CTGCAGAAGG
3751  TGGAGAAGAC CCTGCTCAGG CAGCAGGTGG AGCTGTACCG CCTTCTCAGC
3801  AGGAACACTT ACCTGGAGTG GGAGGACAGT GTCCTGGGGC GGCACATCTT
3851  CTGGAGACGA CTCAGAAAAG CCCTGCTGGA TGGTAAATCA TGGAATCCAG
3901  AAGGAACAGT GGGTACAGGA TGCAATTGGC AGGAAGCAAC ATCTATCTGA
3951  AGAGGAAAAA TAAAAACCTC CTGAGGCATT TCTTGCCCAG CTGGGTCCAA
4001  CACTTGTTCA GTTAATAAGT ATTAAATGCT GCCACATGTC AGGCCTTATG
4051  CTAAGGGTGA GTAATTCCAT GGTGCACTAG ATATGCAGGG CTGCTAATCT
4101  CAAGGAGCTT CCAGTGCAGA GGGAATAAAT GCTAGACTAA AATACAGAGT
4151  CTTCCAGGTG GGCATTTCAA CCAACTCAGT CAAGGAACCC ATGACAAAGA
4201  AAGTCATTTC AACTCTTACC TCATCAAGTT GAATAAAGAC AGAGAAAACA
4251  GAAAGAGACA TTGTTCTTTT CCTGAGTCTT TTGAATGGAA•ATTGTATTAT
4301  GTTATAGCCA TCATAAAACC ATTTTGGTAG TTTTGACTGA ACTGGGTGTT
4351  CACTTTTTCC TTTTTGATTG AATACAATTT AAATTCTACT TGATGACTGC
4401  AGTCGTCAAG GGGCTCCTGA TGCAAGATGC CCCTTCCATT TTAAGTCTGT
4451  CTCCTTACAG AGGTTAAAGT CTAGTGGCTA ATTCCTAAGG AAACCTGATT
4501  AACACATGCT CACAACCATC CTGGTCATTC TCGAGCATGT TCTATTTTTT
4551  AACTAATCAC CCCTGATATA TTTTTATTTT TATATATCCA GTTTTCATTT
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FIG. 9D (Continued)

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4601  TTTTACGTCT TGCCTATAAG CTAATATCAT AAATAAGGTT GTTTAAGACG
4651  TGCTTCAAAT ATCCATATTA ACCACTATTT TTCAAGGAAG TATGGAAAAG
4701  TACACTCTGT CACTTTGTCA CTCGATGTCA TTCCAAAGTT ATTGCCTACT
4751  AAGTAATGAC TGTCATGAAA GCAGCATTGA AATAATTTGT TTAAAGGGGG
4801  CACTCTTTTA AACGGGAAGA AAATTTCCGC TTCCTGGTCT TATCATGGAC
4851  AATTTGGGCT AGAGGCAGGA AGGAAGTGGG ATGACCTCAG GAGGTCACCT
4901  TTTCTTGATT CCAGAAACAT ATGGGCTGAT AAACCCGGGG TGACCTCATG
4951  AAATGAGTTG CAGCAGAAGT TTATTTTTTT CAGAACAAGT GATGTTTGAT
5001  GGACCTCTGA ATCTCTTTAG GGAGACACAG ATGGCTGGGA TCCCTCCCCT
5051  GTACCCTTCT CACTGCCAGG AGAACTACGT GTGAAGGTAT TCAAGGCAGG
5101  GAGTATACAT TGCTGTTTCC TGTTGGGCAA TGCTCCTTGA CCACATTTTG
5151  GGAAGAGTGG ATGTTATCAT TGAGAAAACA ATGTGTCTGG AATTAATGGG
5201  GTTCTTATAA AGAAGGTTCC CAGAAAAGAA TGTTCATCCA GCCTCCTCAG
5251  AAACAGAACA TTCAAGAAAA GGACAATCAG GATGTCATCA GGGAAATGAA
5301  AATAAAAACC ACAATGAGAT ATCACCTTAT ACCAGGTAGA ATGGCTACTA
5351  TAAAAAAATG AAGTGTCATC AAGGATATAG AGAAATTGGA ACCCTTCTTC
5401  ACTGCTGGAG GGAATGGAAA ATGGTGTAGC CGTTATGAAA AACAGTACGG
5451  AGGTTTCTCA AAAATTAAAA ATAGAACTGC TATATGATCC AGCAATCTCA
5501  CTTCTGTATA TATACCCAAA ATAATTGAAA TCAGAATTTC AAGAAAATAT
5551  TTACACTCCC ATGTTCATTG TGGCACTCTT CACAATCACT GTTTCCAAAG
5601  TTATGGAAAC AACCCAAATT TCCATTGAAA AATAAATGGA CAAAGAAAAT
5651  GTGCATATAC GTACAATGGG ATATTATTCA GCCTAAAAAA AGGGGGNATC
5701  CTGTTATTTA TGACAACATG AATAAACCCG GAGCCATTAT GCTATGTAAA
5751  ATGAGCAAGT AACAGAAAGA CAAATACTGC CTGATTTCAT TTATATGAGG
5801  TTCTAAAATA GTCAAACTCA TAGAAGCAGA GAATAGAACA GTGGTTCCTA
5851  GGGAAAAGGA GGAAGGGAGA AATGAGGAAA TAGGGAGTTG TCTAATTGGT
5901  ATAAAATTAT AGTATGCAAG ATGAATTAGC TCTAAAGATC AGCTGTATAG
5951  CAGAGTTCGT ATAATGAACA ATACTGTATT ATGCACTTAA CATTTTGTTA
6001  AGAGGGTACC TCTCATGTTA AGTGTTCTTA CCATATACAT ATACACAAGG
6051  AAGCTTTTGG AGGTGATGGA TATATTTATT ACCTTGATTG TGGTGATGGT
6101  TTGACAGGTA TGTGACTATG TCTAAACTCA TCAAATTGTA TACATTAAAT
6151  ATATGCAGTT TTATAATATC AATTATGTCT GAATGAAGCT ATAAAAAAGA
6201  AAAGACAACA AAATTCAGTT GTCAAAACTG GAAATATGAC CACAGTCAGA
6251  AGTGTTTGTT ACTGAGTGTT TCAGAGTGTG TTTGGTTTGA GCAGGTCTAG
6301  GGTGATTGAA CATCCCTGGG TGTGTTTCCA TGTCTCATGT ACTAGTGAAA
6351  GTAGATGTGT GCATTTGTGC ACATATCCCT ATGTATCCCT ATCAGGGCTG
6401  TGTGTATTTG AAAGTGTGTG TGTCCGCATG ATCATATCTG TATAGAAGAG
6451  AGTGTGATTA TATTTCTTGA AGAATACATC CATTTGAAAT GGATGTCTAT
6501  GGCTGTTTGA GATGAGTTCT CTACTCTTGT GCTTGTACAG TAGTCTCCCC
6551  TTATCCCTTA TGCTTGGTGG ATACGTTCTT AGACCCCAAG TGGATCTCTG
6601  AGACCGCAGA TGGTACCAAA CCTCATATAT GCAATATTTT TTCCTATACA
6651  TAAATACCTA AGATAAAGTT CATCTTCTGA ATTAGGCACA GTAAGAGATT
6701  AACAATAACT AACAATAAAA TTGAATAGTT ATAATAATAT ATTGTAATAA
6751  AAGTTATGTG AATGTGATCT CTTTCTTTTC TCTCTC
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FIG. 9D (Continued)